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3	6546	(B ADJ (CELL OR LYMPHOCYTE)).TI,AB,CLM.	USPAT; US-PGPUB; EPO; DERWENT	2004/08/26 14:52
4	18264	(DETERMINANT OR EPITOP$6).TI,AB,CLM.	USPAT; US-PGPUB; EPO; DERWENT	2004/08/26 14:53
5	617	((T ADJ (CELL OR LYMPHOCYTE)).TI,AB,CLM.) AND ((B ADJ (CELL OR LYMPHOCYTE)).TI,AB,CLM.) AND ((DETERMINANT OR EPITOP$6).TI,AB,CLM.)	USPAT; US-PGPUB; EPO; DERWENT	2004/08/26 14:54
6	1368	(((T ADJ (CELL OR LYMPHOCYTE)).TI,AB,CLM.) OR ((B ADJ (CELL OR LYMPHOCYTE)).TI,AB,CLM.)) NEAR3 ((DETERMINANT OR EPITOP$6).TI,AB,CLM.)	USPAT; US-PGPUB; EPO; DERWENT	2004/08/26 14:54
7	373	(((T ADJ (CELL OR LYMPHOCYTE)).TI,AB,CLM.) AND ((B ADJ (CELL OR LYMPHOCYTE)).TI,AB,CLM.) AND ((DETERMINANT OR EPITOP$6).TI,AB,CLM.)) AND ((((T ADJ (CELL OR LYMPHOCYTE)).TI,AB,CLM.) OR ((B ADJ (CELL OR LYMPHOCYTE)).TI,AB,CLM.)) NEAR3 ((DETERMINANT OR EPITOP$6).TI,AB,CLM.))	USPAT; US-PGPUB; EPO; DERWENT	2004/08/26 14:54

L Number	Hits	Search Text	DB	Time stamp
1	1092	melittin	USPAT; US-PGPUB; EPO; DERWENT	2004/08/26 14:08
2	165386	peptide	USPAT; US-PGPUB; EPO; DERWENT	2004/08/26 14:08
3	124577	polypeptide	USPAT; US-PGPUB; EPO; DERWENT	2004/08/26 14:08
4	212179	fragment	USPAT; US-PGPUB; EPO; DERWENT	2004/08/26 14:08
5	2225	subfragment	USPAT; US-PGPUB; EPO; DERWENT	2004/08/26 14:08
7	46799	epitop$6	USPAT; US-PGPUB; EPO; DERWENT	2004/08/26 14:11
8	561251	segment	USPAT; US-PGPUB; EPO; DERWENT	2004/08/26 14:11
9	323	melittin near3 (peptide or polypeptide or fragment or subfragment or epitop$6 or segment)	USPAT; US-PGPUB; EPO; DERWENT	2004/08/26 14:12

L Number	Hits	Search Text	DB	Time stamp
1	253	(530/387.2).CCLS.	USPAT; US-PGPUB; EPO; DERWENT	2004/08/26 14:05
2	231	(424/131.1).CCLS.	USPAT; US-PGPUB; EPO; DERWENT	2004/08/26 14:05
3	381	((530/387.2).CCLS.) or ((424/131.1).CCLS.)	USPAT; US-PGPUB; EPO; DERWENT	2004/08/26 14:06

081,076

CAS SEARCH FOR MELITTIN PEPTIDE #2

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STRUCTURE FILE UPDATES:   24 AUG 2004  HIGHEST RN 732209-96-0
DICTIONARY FILE UPDATES:  24 AUG 2004  HIGHEST RN 732209-96-0

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

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L2             1 SEA FILE=REGISTRY ABB=ON  PLU=ON  L1 AND 9/SQL     <- exact (closed)

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               SET COST OFF

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L3            29 S L1 NOT L2

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L5            11 S L3
L6            11 S L4,L5 AND ?MELITTIN?
L7             2 S L4,L5 AND (COUTTS S? OR BARSTAD P? OR IVERSON ? OR JONES D?)/
L8             2 S L4,L5 AND (LAJOLLA? OR LA JOLLA?)/PA,CS
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L14            1 S L4 AND L5-L13

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RN    181469-64-7  REGISTRY
CN    Glycine, N-[N2-[N2-[N2-[N2-[N2-[N2-(N-L-tryptophyl-L-isoleucyl)-L-lysyl]-L-
      arginyl]-L-lysyl]-L-arginyl]-L-glutaminyl]-L-glutaminyl]- (9CI)  (CA INDEX
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NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 9

SEQ 1 WIKRKRQQG
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HITS AT: 1-9
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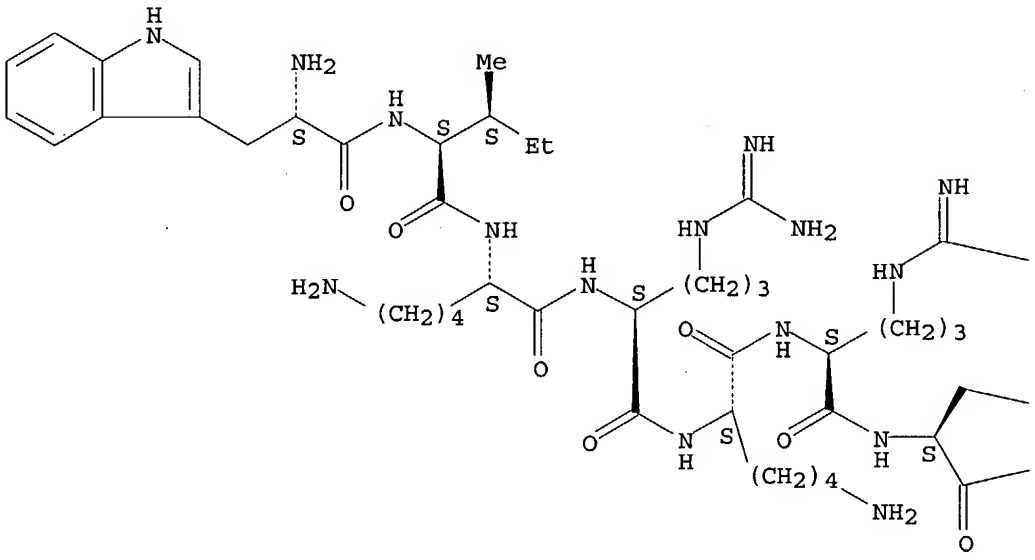
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

Absolute stereochemistry.

PAGE 1-A



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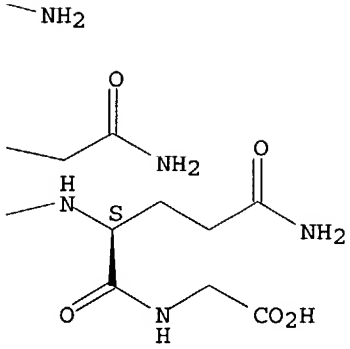

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 125:219609

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FILE 'USPAT2' ENTERED AT 09:31:39 ON 26 AUG 2004
CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

=> d bib abs hitstr l15

related to instant Pat Searly

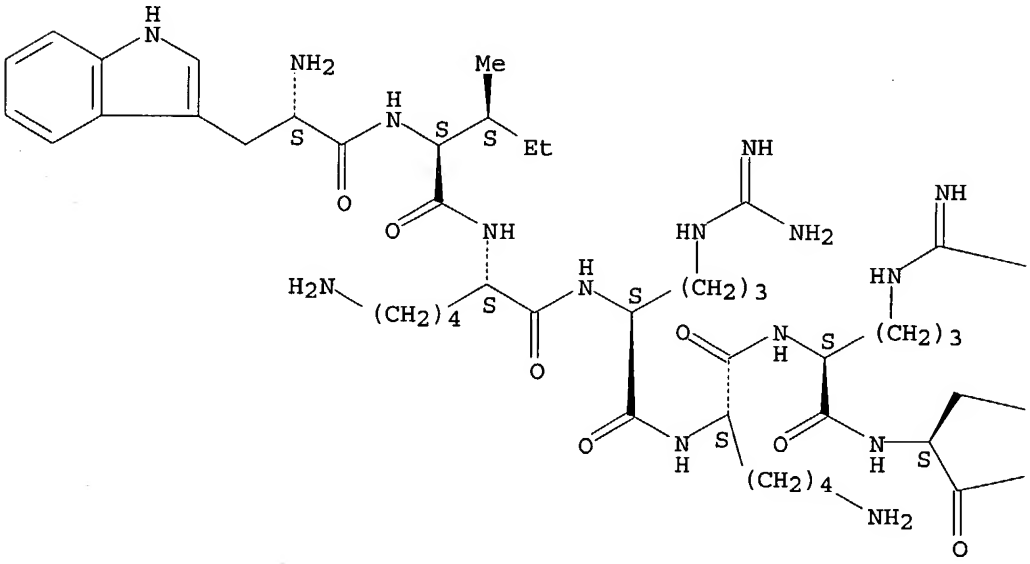
L15 ANSWER 1 OF 1 USPATFULL on STN
AN 96:80258 USPATFULL
TI Chemically-defined non-polymeric valency platform molecules and conjugates thereof
IN Coutts, Stephen M., Rancho Santa Fe, CA, United States
Jones, David S., San Diego, CA, United States
Livingston, Douglas A., San Diego, CA, United States
Yu, Lin, San Diego, CA, United States
PA La Jolla Pharmaceutical Company, San Diego, CA, United States (U.S. corporation)
PI US 5552391 19960903
AI US 1993-152506 19931115 (8)
RLI Continuation-in-part of Ser. No. US 1992-914869, filed on 15 Jul 1992, now patented, Pat. No. US 5276013 which is a continuation-in-part of Ser. No. US 1990-494118, filed on 13 Mar 1990, now patented, Pat. No. US 5162515, issued on 10 Nov 1992 which is a continuation-in-part of Ser. No. US 1990-466138, filed on 16 Jan 1990, now abandoned And a continuation-in-part of Ser. No. US 1993-118055, filed on 8 Sep 1993 which is a continuation-in-part of Ser. No. US 1991-652648, filed on 8 Feb 1991, now patented, Pat. No. US 5268454
DT Utility

FS Granted
EXNAM Primary Examiner: Rollins, John W.
LREP Morrison & Foerster
CLMN Number of Claims: 12
ECL Exemplary Claim: 1
DRWN 16 Drawing Figure(s); 16 Drawing Page(s)
LN.CNT 3038
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Chemically-defined, non-polymeric valency platform molecules and conjugates comprising chemically-defined valency platform molecules and biological or chemical molecules including polynucleotide duplexes of at least 20 base pairs that have significant binding activity for human lupus anti-dsDNA autoantibodies.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **181469-64-7DP**, conjugates
(chemical-defined non-polymeric valency platform mols. and conjugates with polynucleotide or melittin as toleragen for autoimmune disease or systemic lupus erythematosus or bee venom)
RN 181469-64-7 USPATFULL
CN Glycine, N-[N2-[N2-[N2-[N2-[N2-[N2-(N-L-tryptophyl-L-isoleucyl)-L-lysyl]-L-arginyl]-L-lysyl]-L-arginyl]-L-glutaminyl]-L-glutaminyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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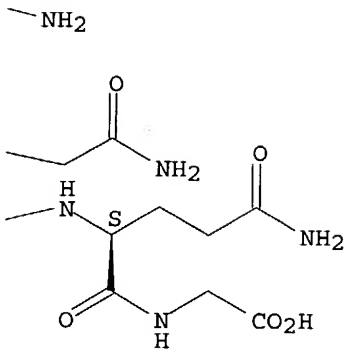

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FILE COVERS 1907 - 26 Aug 2004 VOL 141 ISS 9
FILE LAST UPDATED: 25 Aug 2004 (20040825/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d all hitstr l14

related to
mustard
Pat Jarvis

L14 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1996:577842 HCAPLUS
DN 125:219609
ED Entered STN: 28 Sep 1996
TI Chemically-defined non-polymeric valency platform molecules and conjugates thereof
IN **Coutts, Stephen M.**; **Jones, David S.**; Livingston, Douglas A.; Yu, Lin
PA **La Jolla** Pharmaceutical Company, USA

SO U.S., 59 pp., Cont.-in-part of U.S. 5,276,013.
CODEN: USXXAM
DT Patent
LA English
IC ICM A61A031-70
ICS C07H019-00; C07H019-04
NCL 514044000
CC 15-2 (Immunochemistry)
FAN.CNT 8

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EP 1993-309288	A	19931122
JP 1993-298747	A3	19931129
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WO 1994-US10031	W	19940908
US 1995-453254	A3	19950530
US 1996-769041	A1	19961218

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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	NCL	514044000
US 5552391	ECLA	A61K039/385; A61K047/48H4; A61K047/48R2T; C07H021/00C4 <--
US 6060056	ECLA	A61K039/385; A61K047/48H4 <--
US 5606047	ECLA	A61K039/385; C07H021/00C4; A61K047/48H4; A61K047/48R2T <--
US 5633395	ECLA	A61K039/385; C07H021/00C4 <--
US 2002082400	ECLA	A61K039/385; A61K047/48H4
US 2002107389	ECLA	A61K039/385; A61K047/48H4
US 2003162953	ECLA	A61K039/385; A61K047/48H4

AB Chemical-defined, non-polymeric valency platform mols. and conjugates comprising chemical-defined valency platform mols. and biol. or chemical mols. including polynucleotide duplexes of at least 20 base pairs that have significant binding activity for human lupus anti-dsDNA autoantibodies. The polynucleotide duplex-containing conjugates are useful as toleragen for treating human autoimmune disease or systemic lupus erythematosus. In example, chemical-defined valency platform mols. were synthesized, conjugated with polynucleotide (PN) and hemagglutinin or sheep red blood cell, and used as toleragen to reduce PN-specific antibody-producing cells. Similarly, conjugates of the platform mols. and **melittin** peptides were prepared for inducing tolerance mice to **melittin.**

ST toleragen nonpolymeric valency platform mol conjugate; polynucleotide hemagglutinin conjugate toleragen lupus erythematosus; **melittin** conjugate bee venom toleragen

IT Immune tolerance
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(-inducing agent; chemical-defined non-polymeric valency platform mols. and conjugates with polynucleotide or **melittin** as toleragen for autoimmune disease or systemic lupus erythematosus or bee venom)

IT Antibodies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(-producing cells; chemical-defined non-polymeric valency platform mols. and conjugates with polynucleotide or **melittin** as toleragen for autoimmune disease or systemic lupus erythematosus or bee venom)

IT Venoms
(bee; chemical-defined non-polymeric valency platform mols. and conjugates with polynucleotide or **melittin** as toleragen for autoimmune disease or systemic lupus erythematosus or bee venom)

IT Autoimmune disease
Lupus erythematosus
Protein sequences
(chemical-defined non-polymeric valency platform mols. and conjugates with polynucleotide or **melittin** as toleragen for autoimmune disease or systemic lupus erythematosus or bee venom)

IT Deoxyribonucleic acids
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(double stranded; chemical-defined non-polymeric valency platform mols. and conjugates with polynucleotide or **melittin** as toleragen for autoimmune disease or systemic lupus erythematosus or bee venom)

IT Erythrocyte
(sheep; chemical-defined non-polymeric valency platform mols. and conjugates with polynucleotide or **melittin** as toleragen for autoimmune disease or systemic lupus erythematosus or bee venom)

IT Antibodies
RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(auto-, to double stranded DNA; chemical-defined non-polymeric valency platform mols. and conjugates with polynucleotide or **melittin** as toleragen for autoimmune disease or systemic lupus erythematosus or bee venom)

IT Agglutinins and Lectins
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hemagglutinins, keyhole limpet; chemical-defined non-polymeric valency platform mols. and conjugates with polynucleotide or **melittin** as toleragen for autoimmune disease or systemic lupus erythematosus or bee venom)

IT Nucleotides, biological studies
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(poly-, conjugates, chemical-defined non-polymeric valency platform mols. and conjugates with polynucleotide or **melittin** as toleragen for autoimmune disease or systemic lupus erythematosus or bee venom)

IT 20449-79-0, **Melittin**
RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(chemical-defined non-polymeric valency platform mols. and conjugates with polynucleotide or **melittin** as toleragen for autoimmune disease or systemic lupus erythematosus or bee venom)

IT 181469-52-3P
RL: MOA (Modifier or additive use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(chemical-defined non-polymeric valency platform mols. and conjugates with polynucleotide or **melittin** as toleragen for autoimmune disease or systemic lupus erythematosus or bee venom)

IT 76-05-1, reactions 79-08-3, Bromoacetic acid 98-88-4, Benzoyl chloride 100-02-7, 4-Nitrophenol, reactions 107-13-1, 2-Propenenitrile, reactions 108-18-9, Diisopropylamine 109-02-4, N-Methylmorpholine 115-77-5, reactions 142-73-4, Iminodiacetic acid 150-13-0, 4-Aminobenzoic acid 288-32-4, Imidazole, reactions 288-94-8, 1H-Tetrazole 429-41-4, Tetrabutylammonium fluoride 501-53-1, Benzylchloroformate 530-62-1 535-87-5, 3,5-Diaminobenzoic acid 538-75-0, Dicyclohexylcarbodiimide 929-59-9 1947-00-8 2009-83-8, 6-Chlorohexanol 6066-82-6, N-Hydroxysuccinimide 7087-68-5, Diisopropylethylamine 17134-17-7, Triethyleneglycol-bis-chloroformate 18162-48-6 24424-99-5 24991-53-5 40615-36-9, 4,4'-Dimethoxytriphenylmethyl chloride 54907-61-8, Iodoacetic anhydride 55750-48-6, N-Methoxycarbonylmaleimide 93183-36-9, Diisopropylammonium tetrazolide 102691-36-1 154231-82-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(chemical-defined non-polymeric valency platform mols. and conjugates with polynucleotide or **melittin** as toleragen for autoimmune disease or systemic lupus erythematosus or bee venom)

IT 1633-78-9P, 6-Mercaptohexan-1-ol 2465-91-0P, Tetrakis-(2-cyanoethoxymethyl)methane 5434-66-2P 19199-82-7P, 4-Nitrophenylbromoacetate 31252-85-4P, p-Nitrophenyliodoacetate 32200-04-7P 35164-96-6P 35638-19-8P 38710-44-0P, 3,5-Bis-(iodoacetamido)benzoic acid 56074-20-5P 66095-18-9P 80901-86-6P 82055-94-5P 85807-84-7P 148254-12-0P 148254-13-1P 148254-14-2P 148254-18-6P 154231-80-8P 154231-81-9P 163032-98-2P 163778-62-9P 163778-63-0P 163778-64-1P 169744-02-9P 169744-03-0P 169744-04-1P 169744-05-2P 169744-06-3P 169744-07-4P 169744-08-5P

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181468-97-3P 181469-02-3P 181469-05-6P 181469-09-0P 181469-17-0P
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RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(chemical-defined non-polymeric valency platform mols. and conjugates with polynucleotide or **melittin** as toleragen for autoimmune disease or systemic lupus erythematosus or bee venom)

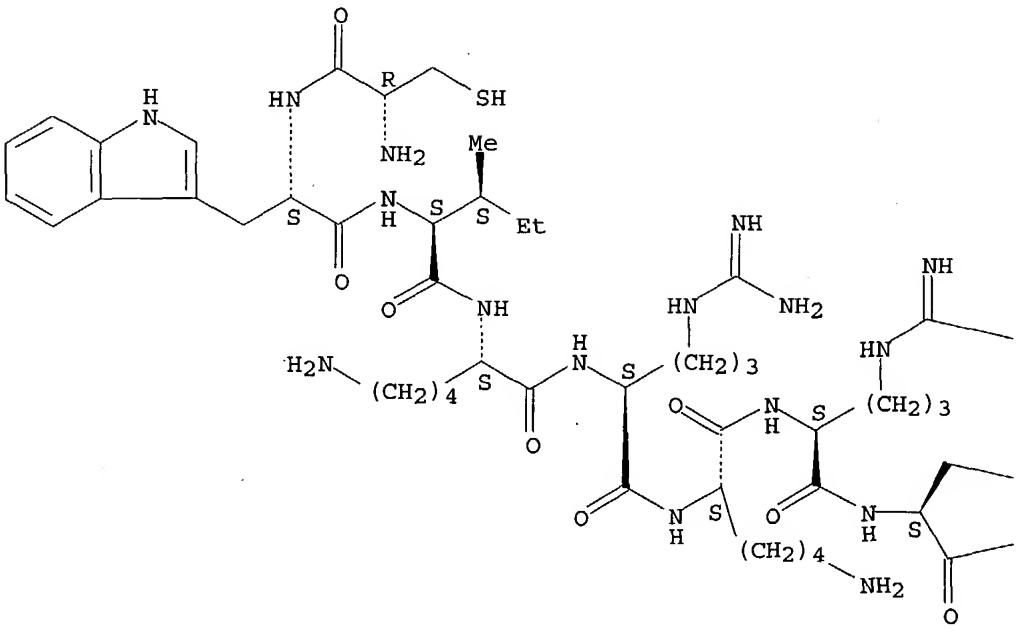
IT 123168-46-7DP, conjugates **169744-35-8DP**, conjugates
169744-36-9DP, conjugates 169744-37-0DP, conjugates 181469-59-0DP, conjugates **181469-64-7DP**, conjugates **181469-69-2DP**, conjugates **181469-73-8DP**, conjugates **181469-77-2DP**, conjugates
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(chemical-defined non-polymeric valency platform mols. and conjugates with polynucleotide or **melittin** as toleragen for autoimmune disease or systemic lupus erythematosus or bee venom)

IT **169744-35-8DP**, conjugates **181469-64-7DP**, conjugates **181469-69-2DP**, conjugates **181469-73-8DP**, conjugates **181469-77-2DP**, conjugates
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(chemical-defined non-polymeric valency platform mols. and conjugates with polynucleotide or **melittin** as toleragen for autoimmune disease or systemic lupus erythematosus or bee venom)

RN 169744-35-8 HCAPLUS
CN Glycine, N-[N2-[N2-[N2-[N2-[N2-[N2-[N-(N-L-cysteinyl-L-tryptophyl)-L-isoleucyl]-L-lysyl]-L-arginyl]-L-lysyl]-L-arginyl]-L-glutaminyl]-L-glutaminyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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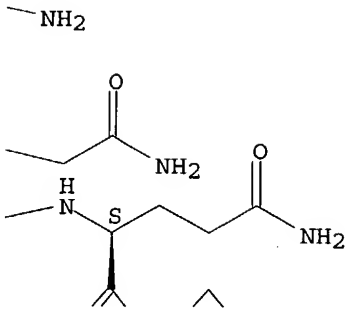

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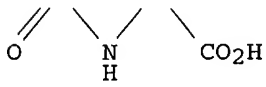

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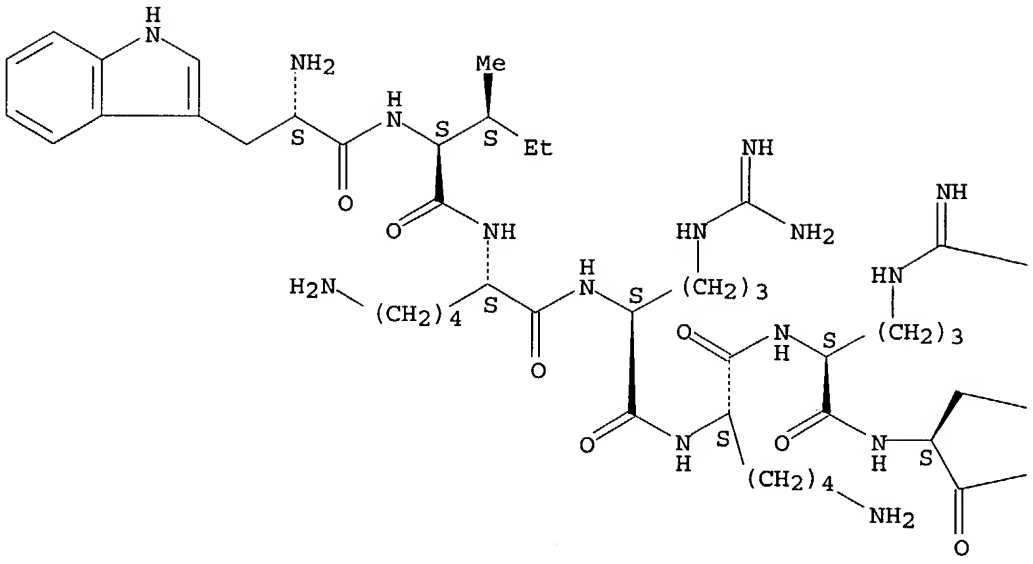
Absolute stereochemistry.

PAGE 1-A



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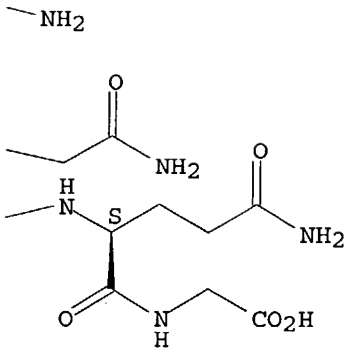

RN 181469-69-2 HCAPLUS
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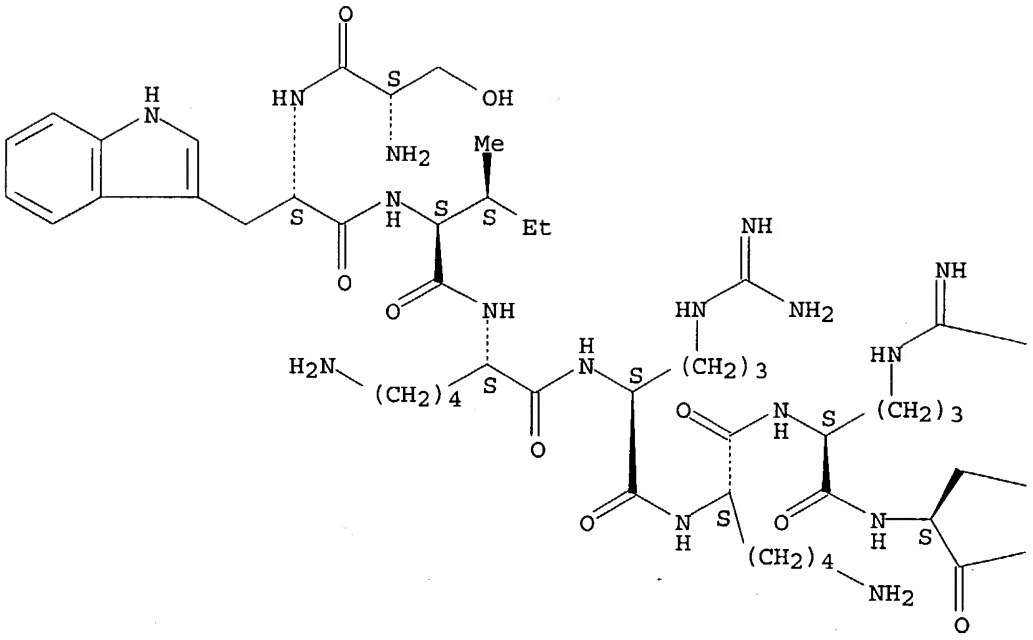
Absolute stereochemistry.

PAGE 1-A



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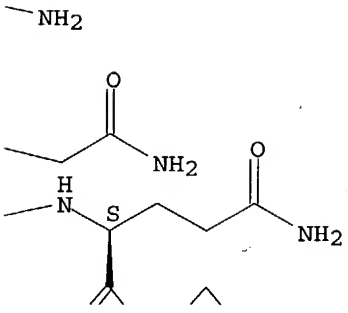

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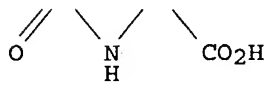

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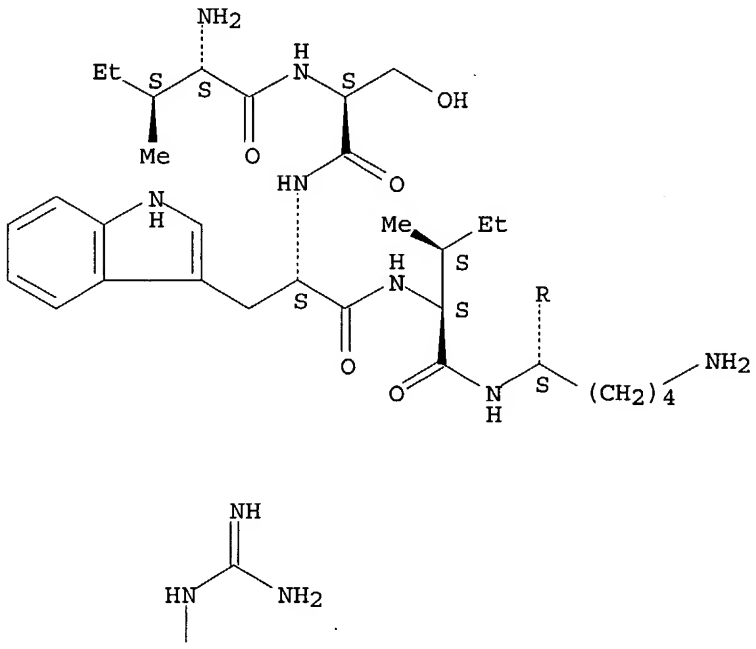
Absolute stereochemistry.

PAGE 1-A



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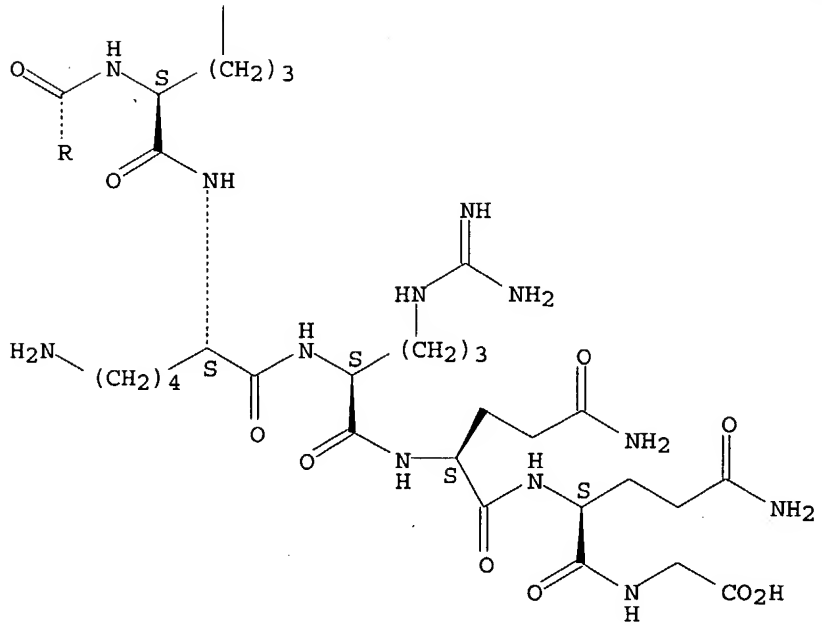

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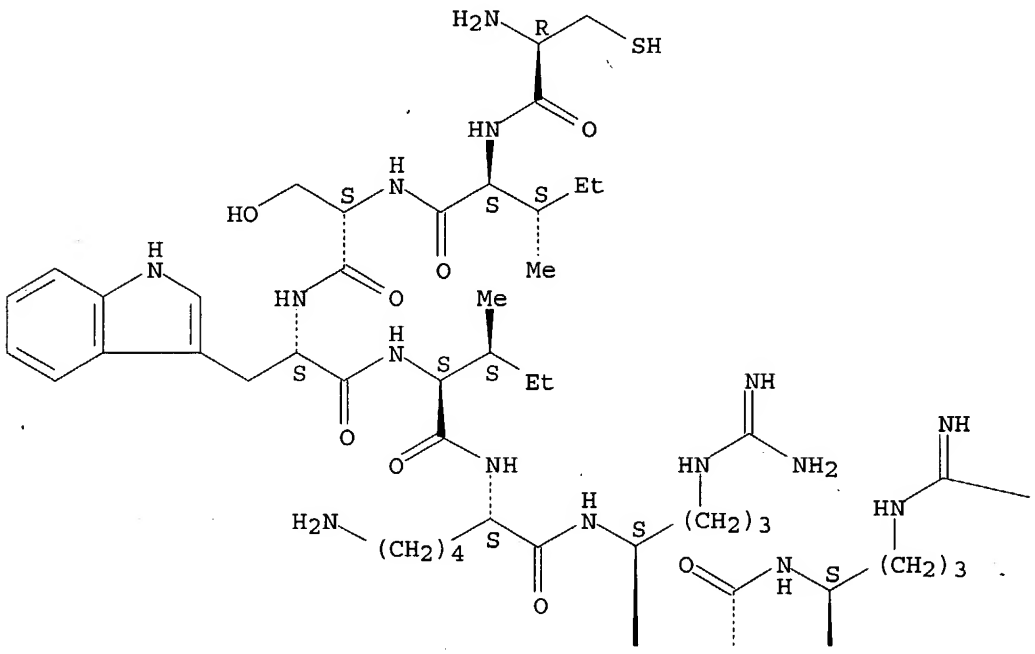
Absolute stereochemistry.

PAGE 1-A



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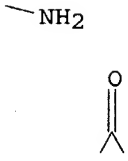

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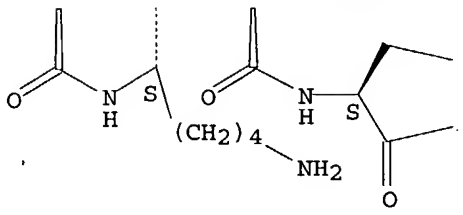

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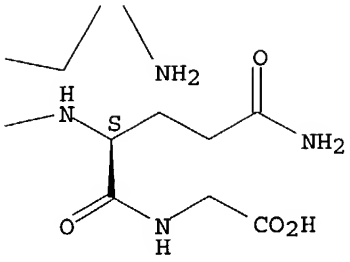

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DN   124:290272
ED   Entered STN:  03 Nov 1995
TI   Preparation of chemically-defined non-polymeric valency platform molecules
     and conjugates thereof.
IN   Coutts, Stephen; Jones, David S.; Livingston, Douglas
     Alan; Yu, Lin
PA   La Jolla Pharmaceutical Co., Can.
SO   Eur. Pat. Appl., 76 pp.
     CODEN: EPXXDW
DT   Patent
LA   English
IC   ICM  A61K047-48
CC   34-3 (Amino Acids, Peptides, and Proteins)
     Section cross-reference(s): 1, 15, 33
FAN.CNT 8
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     EP 642798           A3     19980916
          R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE
     US 6060056          A      20000509    US 1993-118055         19930908 <--
     US 5552391          A      19960903    US 1993-152506         19931115
PRAI US 1993-118055      A      19930908
     US 1993-142598      A      19931022
     US 1993-152506      A      19931115
     EP 1993-309288      A      19931122
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related to instant pat found

US 1990-466138		B2	19900116
US 1990-494118		A2	19900313
US 1991-652648		A2	19910208
US 1992-914869		A2	19920715

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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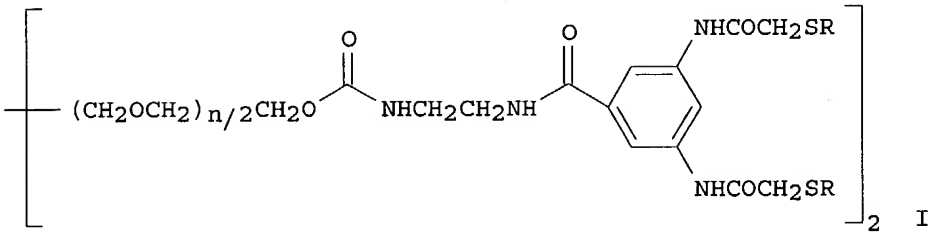

I

AB Conjugates comprising biol. or chemical mols., including polynucleotide duplexes of at least 20 base pairs that have significant binding activity for human lupus anti-dsDNA autoantibodies, reacted with valency platforms G1(T1)n, G2[L2J2Z2(pT2)]m [G1, G2 = null, (branched) chain containing 1-2000 atoms selected from C, N, O, Si, P, S; T1, T2 = NHR, CONHNHR, NHNHR, CO2H, CO2R1, COX, SO2X, SH, OH, etc.; R = H, alkyl, cycloalkyl, aralkyl; R1 = N-succinimidyl, p-nitrophenyl, pentafluorophenyl, etc.; X = halo, other leaving group; L2 = null, O, NR, S; J2 = null, CO, CS; Z2 = radical containing 1-200 atoms selected from C, H, N, O, Si, P, S, and containing attachment sites for functional groups; n, m = 1-32; p = 1-8; with provisos], were prepared Thus, title conjugate (I; R = H-Trp-Ile-Lys-Arg-Lys-Arg-Gln-Gln-Lys-Cys-Gly-OH, bound through a cysteine S atom; n = approx. 74) (preparation given) at 1000 μg/mouse in mice primed and boosted with the parent protein melittin gave an 86.8% reduction in peptide specific plaque forming cells.

ST valency platform mol prepn conjugation; tolerogen conjugate valency platform mol; polyethylene glycol conjugate prepn tolerogen; peptide valency platform conjugate prepn tolerogen; dna valency platform conjugate prepn tolerogen; lupus treatment tolerogen conjugate

IT Immunosuppressants
(preparation of chemical-defined non-polymeric valency platform mol. conjugates
as tolerogens)

IT Antibodies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(preparation of chemical-defined non-polymeric valency platform mol. conjugates
for treating antibody-mediated pathologies)

IT Lupus erythematosus
(treatment of lupus with tolerogens)

IT Lymphocyte
(B-cell, conjugates for induction of B cell anergy to immunogens)

IT Deoxyribonucleic acids
Peptides, preparation
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);

BIOL (Biological study); PREP (Preparation); USES (Uses)
(conjugates, preparation of chemical-defined non-polymeric valency platform mols. and conjugates thereof)

IT 164910-21-8DP, keyhole limpet hemocyanin conjugate
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of chemical-defined non-polymeric valency platform mols. and conjugates thereof)

IT 154637-41-9P 169147-31-3P **169744-34-7P 175644-72-1P**
175644-73-2P 175644-74-3P 175644-75-4P 175864-44-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of chemical-defined non-polymeric valency platform mols. and conjugates thereof)

IT 175705-40-5 175705-41-6 175705-42-7 175864-43-4
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation of chemical-defined non-polymeric valency platform mols. and conjugates thereof)

IT 64-69-7, Iodoacetic acid 79-08-3, Bromoacetic acid 107-13-1, 2-Propenenitrile, reactions 115-77-5, Pentaerythritol, reactions 124-09-4, 1,6-Hexanediamine, reactions 142-73-4, Iminodiacetic acid 150-13-0, p-Aminobenzoic acid 535-87-5, 3,5-Diaminobenzoic acid 821-41-0, 5-Hexen-1-ol 929-59-9 2009-83-8, 6-Chlorohexanol 17134-17-7, Triethyleneglycol bischloroformate 25322-68-3 54907-61-8, Iodoacetic anhydride 55750-48-6, N-Methoxycarbonylmaleimide 64325-78-6D, controlled pore glass-bound 107949-93-9 164910-27-4 169744-32-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of chemical-defined non-polymeric valency platform mols. and conjugates thereof)

IT 1633-78-9P 2465-91-0P 5434-66-2P 19199-82-7P 24991-53-5P
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169744-24-5P 169744-25-6P 169744-26-7P 169744-27-8P 169744-28-9P
169744-29-0P 169744-30-3P 169744-31-4P 169744-33-6P
169744-35-8P 169744-36-9P 169744-37-0P 175707-64-9DP,
controlled pore glass-bound 175864-40-1P 175864-42-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of chemical-defined non-polymeric valency platform mols. and conjugates thereof)

IT **169744-34-7P 175644-72-1P 175644-73-2P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of chemical-defined non-polymeric valency platform mols. and conjugates thereof)

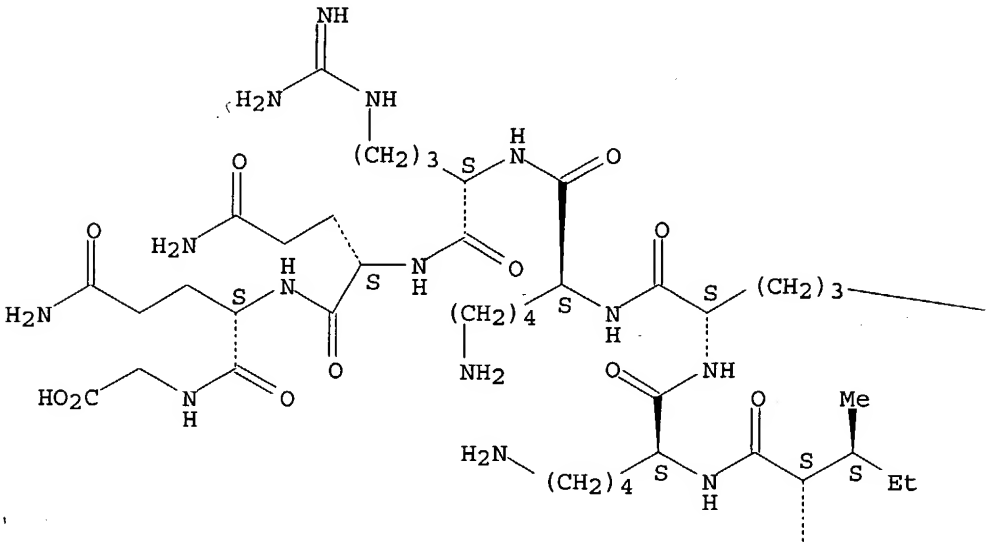
RN 169744-34-7 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α,α'-(oxydi-2,1-ethanediyl)bis[ω-hydroxy-, 1,1'-diester with 3-[[2-[[4-[[[2-(carboxyamino)ethyl]amino]carbonyl]phenyl]amino]-2-oxoethyl]dithio]-L-

alanyl-L-tryptophyl-L-isoleucyl-L-lysyl-L-arginyl-L-lysyl-L-arginyl-L-glutaminyl-L-glutaminylglycine (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-C



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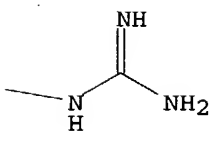

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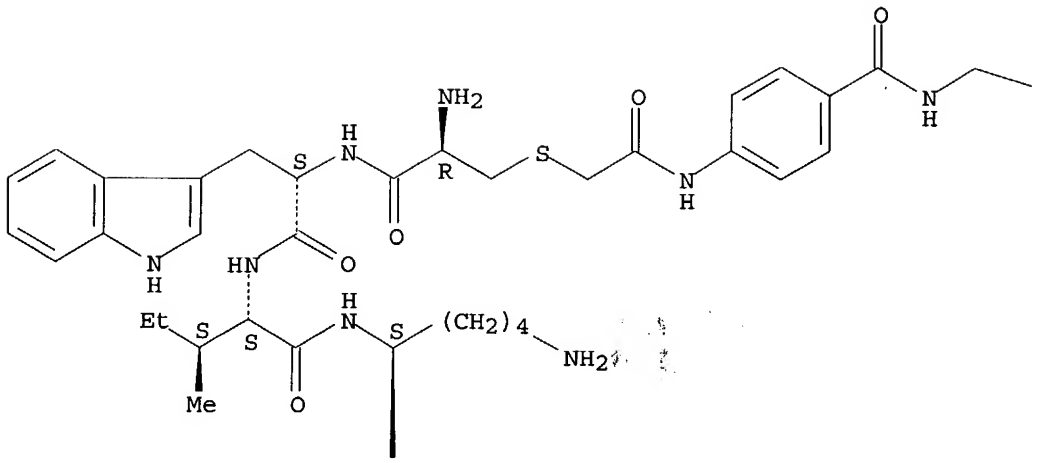

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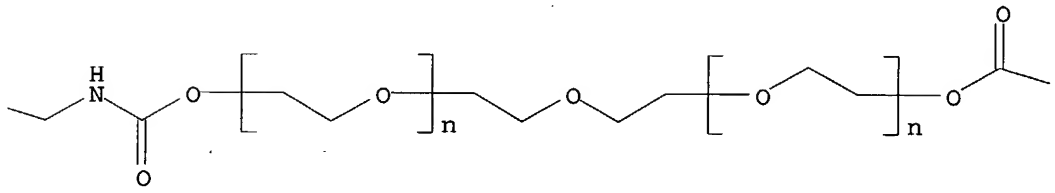

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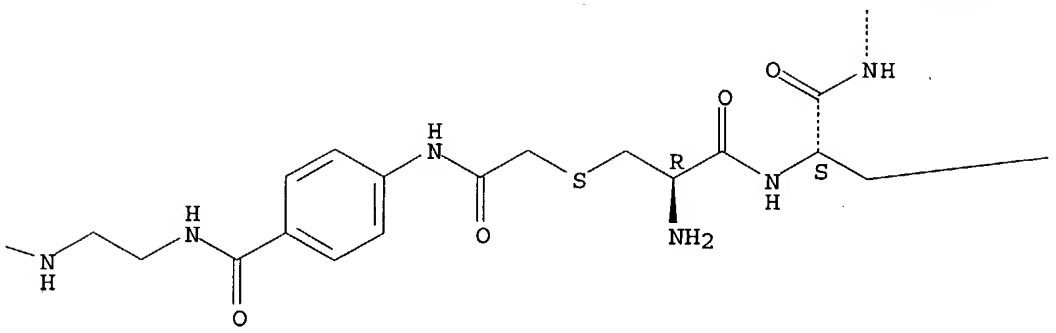

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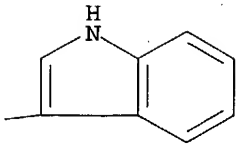

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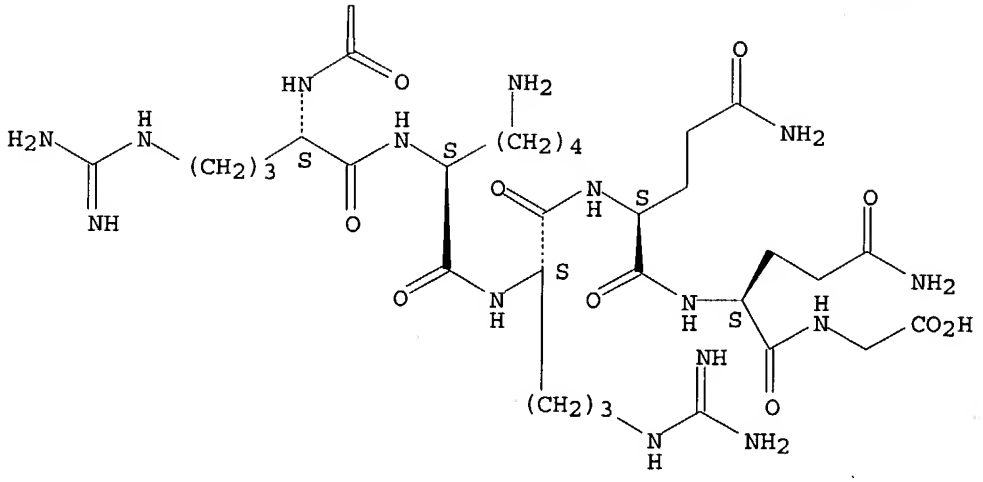

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*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 175644-73-2 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-hydro-ω-hydroxy-, ester with 1,1'-[[5-[[[2-(carboxyamino)ethyl]amino]carbonyl]-1,3-phenylene]bis[imino(2-oxo-2,1-ethanediyl)]]bis[L-cysteinyl-L-isoleucyl-L-seryl-L-tryptophyl-L-isoleucyl-L-lysyl-L-arginyl-L-lysyl-L-arginyl-L-glutaminyl-L-glutaminylglycine] (1:2) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **169744-35-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of chemical-defined non-polymeric valency platform mols. and conjugates thereof)
RN 169744-35-8 HCAPLUS
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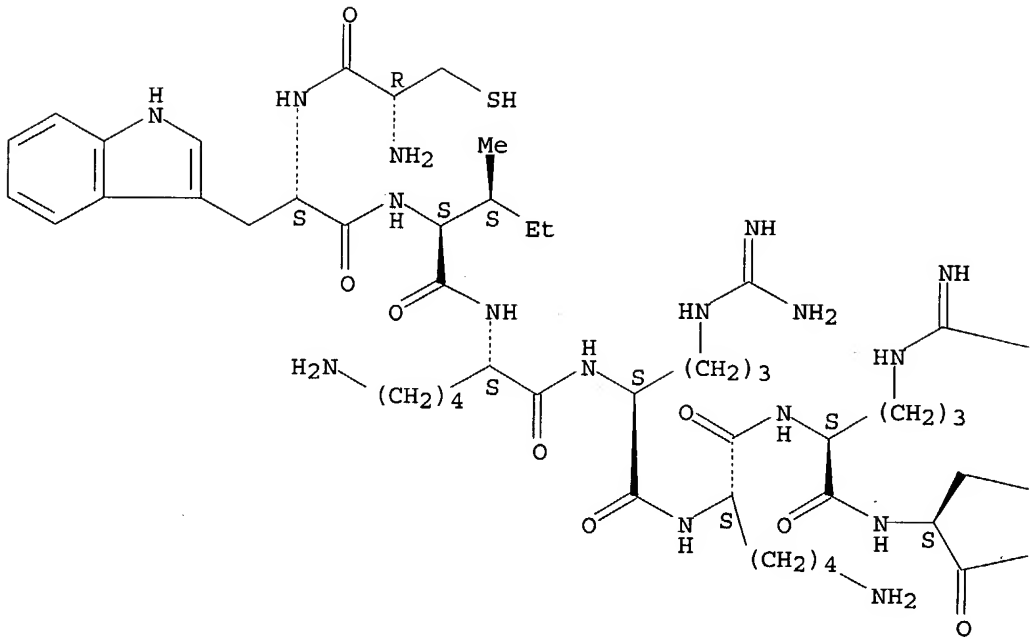
Absolute stereochemistry.

PAGE 1-A



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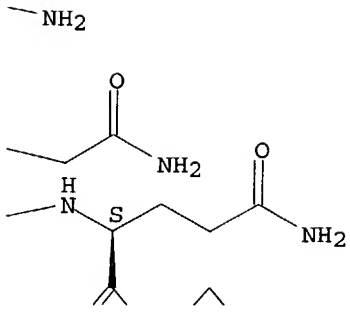

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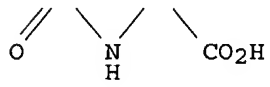

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AN 1997:49226 HCAPLUS
DN 126:155047
ED Entered STN: 23 Jan 1997
TI Antibiotic peptides containing D-amino acids
IN Merrifield, Robert B.; Wade, David; Boman, Hans G.
PA The Rockefeller University, USA
SO U.S., 8 pp., Cont. of U.S. Ser. No. 87,143, abandoned.
CODEN: USXXAM
DT Patent
LA English
IC ICM A61K037-02
ICS C07K014-00
NCL 514012000
CC 10-5 (Microbial, Algal, and Fungal Biochemistry)
Section cross-reference(s): 34
FAN.CNT 1

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PRAI US 1990-474524		19900202	<--	
US 1993-87143		19930706		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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	ICS	C07K014-00
	NCL	514012000

AB Antibiotically and/or antimalarially active enantiomers of naturally occurring antibiotics such as cecropins A, B, and D, melittin, magainins I and II, and their addition, deletion, and replacement analogs, including homologous and heterologous analogs thereof, synthesized from D-amino acids by solid-phase peptide synthesis are claimed.
ST antibiotic peptide enantiomer
IT Antibacterial agents
Antimalarials
(antibiotic peptides containing D-amino acids)
IT Peptides, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); IMF (Industrial manufacture); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(antibiotic peptides containing D-amino acids)
IT Amino acids, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(D-; antibiotic peptides containing D-amino acids)
IT 80451-04-3P, Cecropin A (Platysamia cecropia antibacterial peptide)
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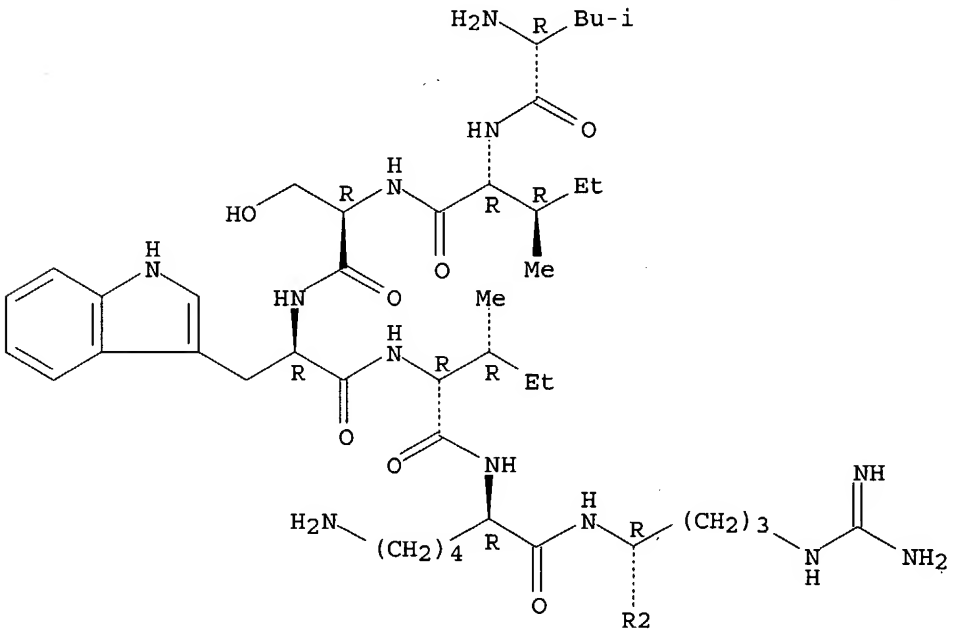
186811-39-2P 186811-40-5P 186811-41-6P 186811-42-7P 186811-44-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); IMF (Industrial manufacture); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(antibiotic peptides containing D-amino acids)

IT **186384-24-7P 186384-25-8P 186384-33-8P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); IMF (Industrial manufacture); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(antibiotic peptides containing D-amino acids)
RN 186384-24-7 HCAPLUS
CN D-Leucine, D-leucyl-D-isoleucyl-D-seryl-D-tryptophyl-D-isoleucyl-D-lysyl-D-arginyl-D-lysyl-D-arginyl-D-glutaminyl-D-glutaminylglycyl-D-isoleucylglycyl-D-alanyl-D-valyl-D-leucyl-D-lysyl-D-valyl-D-leucyl-D-threonyl-D-threonylglycyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

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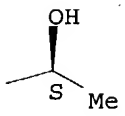

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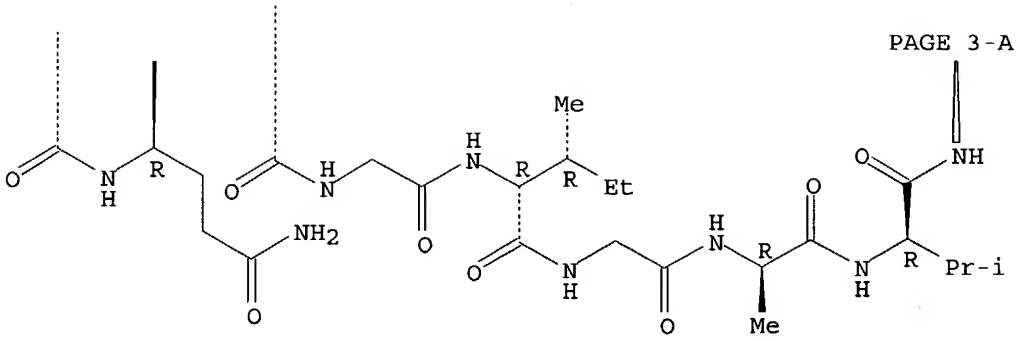
PAGE 3-A



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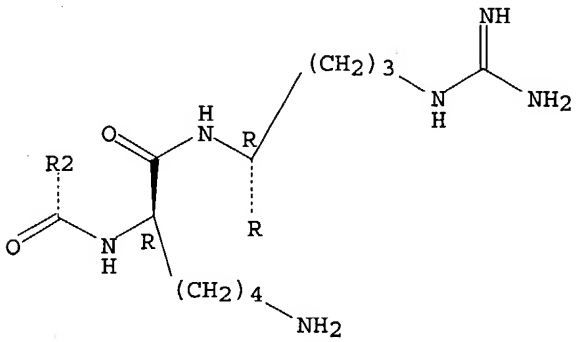
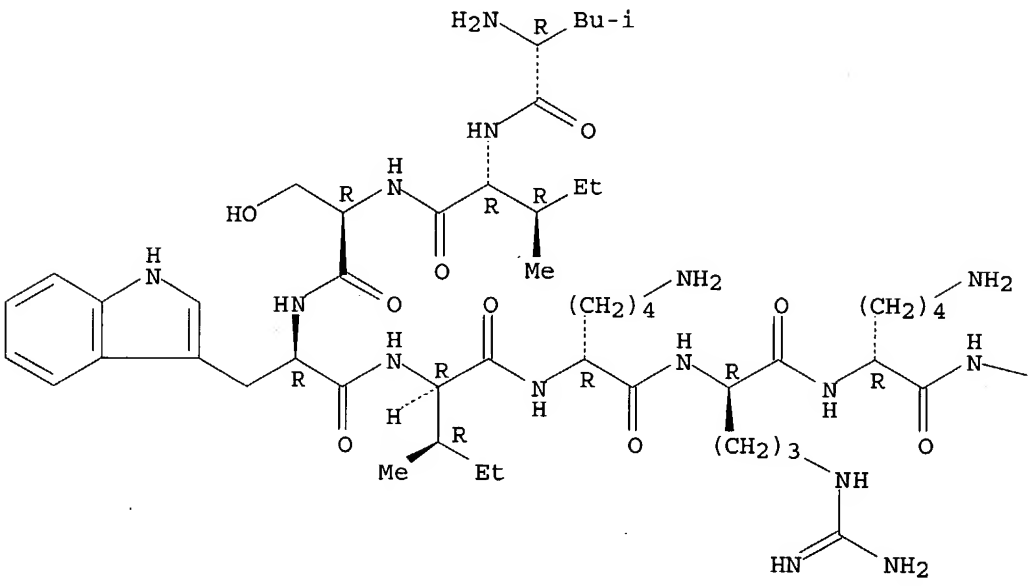


RN 186384-25-8 HCAPLUS
CN D-Lysine, D-leucyl-D-isoleucyl-D-seryl-D-tryptophyl-D-isoleucyl-D-lysyl-D-arginyl-D-lysyl-D-arginyl-D-glutaminyl-D-glutaminylglycyl-D-prolyl-D-alanyl-D-valyl-D-alanyl-D-valyl-D-valylglycyl-D-glutaminyl-D-alanyl-D-

threonyl-D-glutaminyl-D-isoleucyl-D-alanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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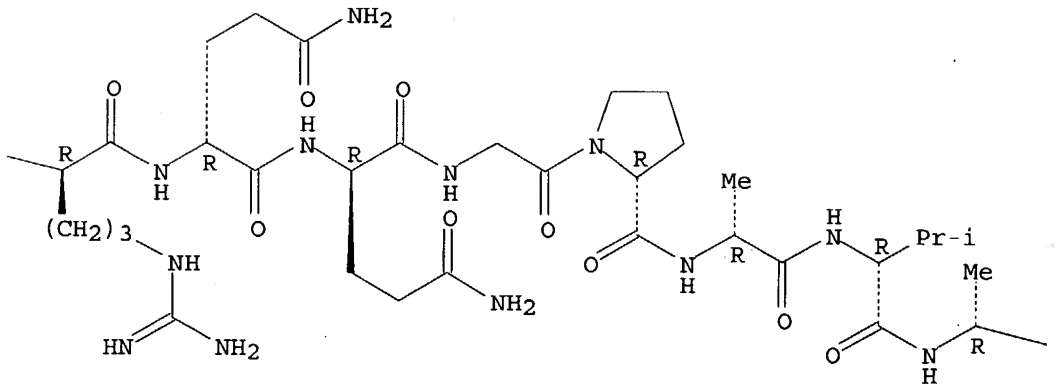

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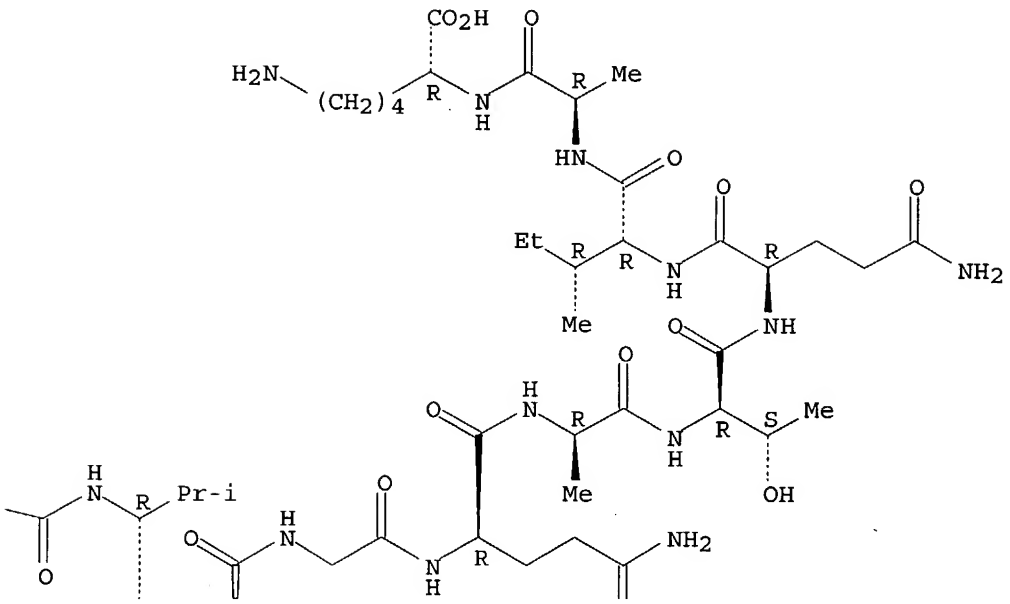

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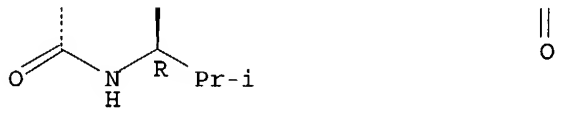
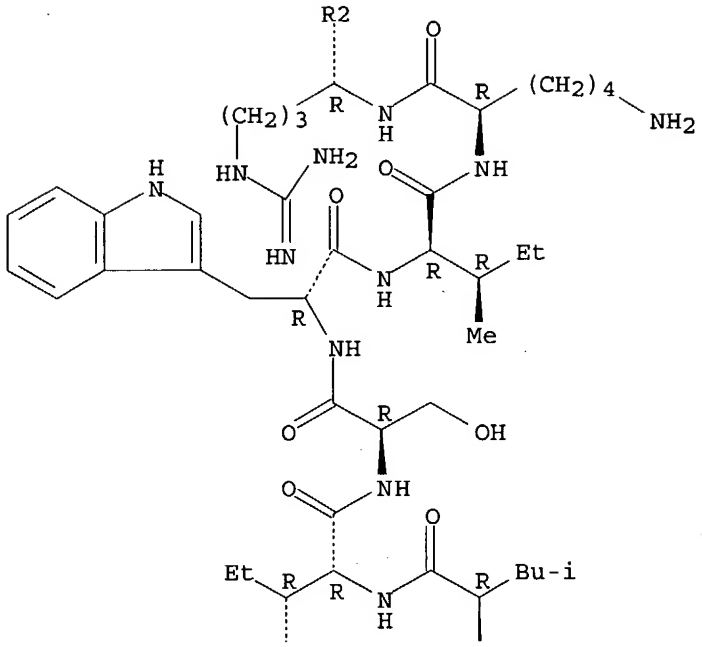


RN 186384-33-8 HCAPLUS

CN D-Serine, D-alanyl-D-leucyl-D-isoleucyl-D-seryl-D-tryptophyl-D-isoleucyl-D-lysyl-D-arginyl-D-lysyl-D-arginyl-D-glutaminyl-D-glutaminylglycyl-D-lysyl-D-alanyl-D-phenylalanyl-D-valylglycyl-D-α-glutamyl-D-isoleucyl-D-methionyl-D-lysyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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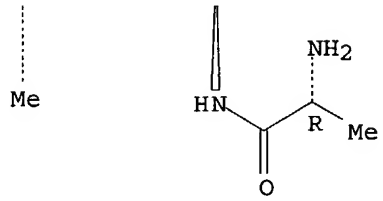

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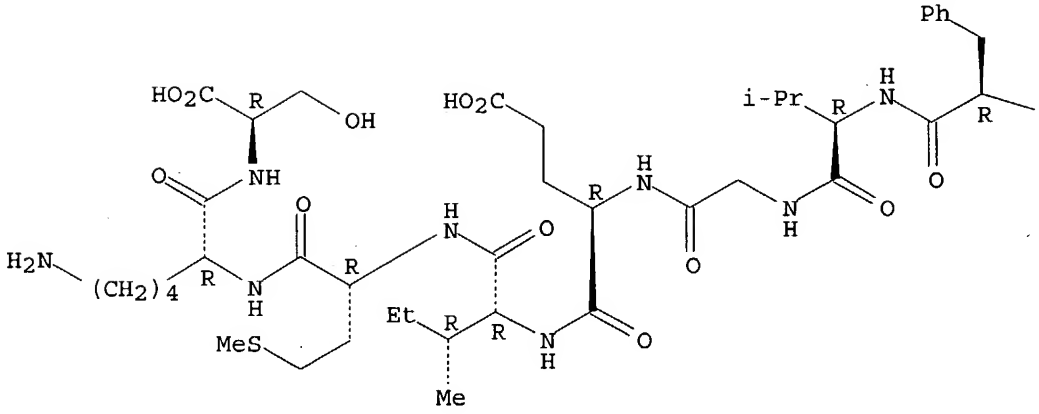

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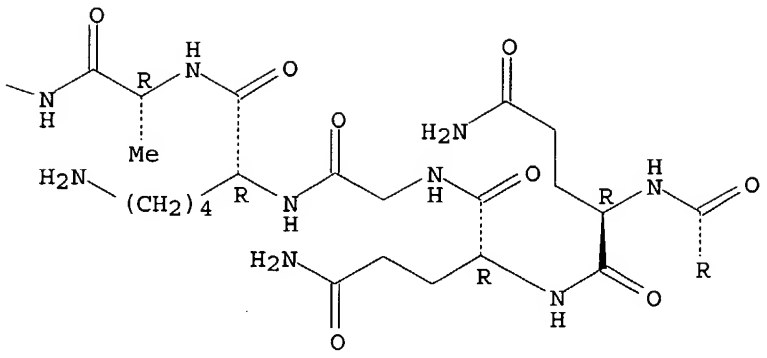

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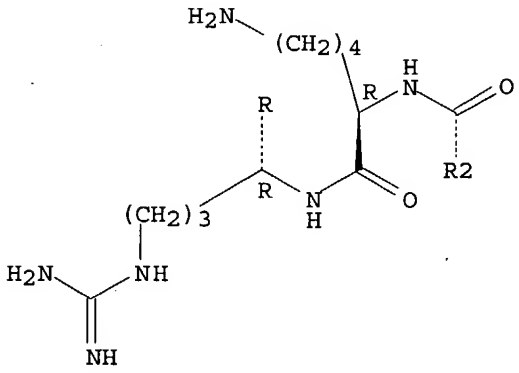


L13 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1990:175449 HCAPLUS
DN 112:175449
ED Entered STN: 12 May 1990
TI Antibacterial and antimalarial properties of peptides that are cecropin-melittin hybrids
AU Boman, H. G.; Wade, D.; Boman, I. A.; Wahlin, B.; Merrifield, R. B.
CS Dep. Microbiol., Univ. Stockholm, Stockholm, S-10691, Swed.
SO FEBS Letters (**1989**), 259(1), 103-6
CODEN: FEBLAL; ISSN: 0014-5793
DT Journal
LA English
CC 10-5 (Microbial Biochemistry)
Section cross-reference(s): 34
AB Solid-phase synthesis was used to produce 5 hybrid peptides containing sequences from the antibacterial peptide, cecropin A, and from the bee venom toxin, melittin. Four of these chimeric peptides showed good antibacterial activity against representative gram-neg. and gram-pos. bacterial species. The best hybrid, cecropin A(1-13)-melittin(1-13) was 100-fold more active than cecropin A against Staphylococcus aureus. It was also a 10-fold better antimalarial agent than cecropin B or magainin 2. Sheep red cells were lysed by melittin at low concns., but not by the hybrid mols., even at 50-fold higher concns.
ST cecropin melittin hybrid peptide antimalarial bactericide
IT Antibiotics

Antimalarials
(cecropin-melittin hybrid peptide as)

IT 20449-79-0, Melittin 80451-04-3, Cecropin A
RL: BIOL (Biological study)
(hybrid peptide prepared from, antibacterial and antimalarial properties of)

IT 126339-11-5P 126437-52-3P 126437-53-4P 126463-95-4P
126463-96-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and antibacterial and antimalarial properties of)

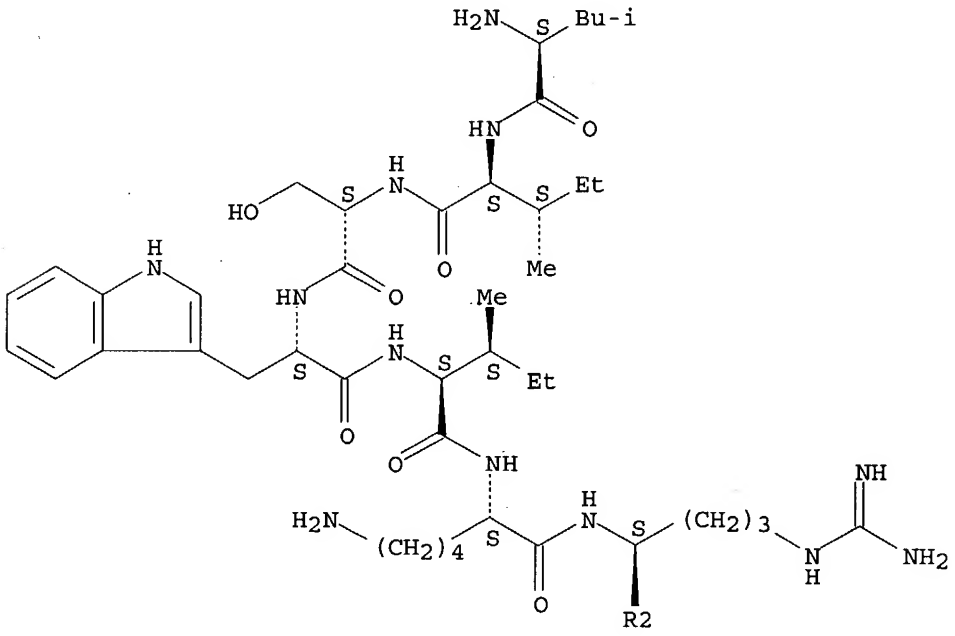
IT **126463-96-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and antibacterial and antimalarial properties of)

RN 126463-96-5 HCAPLUS

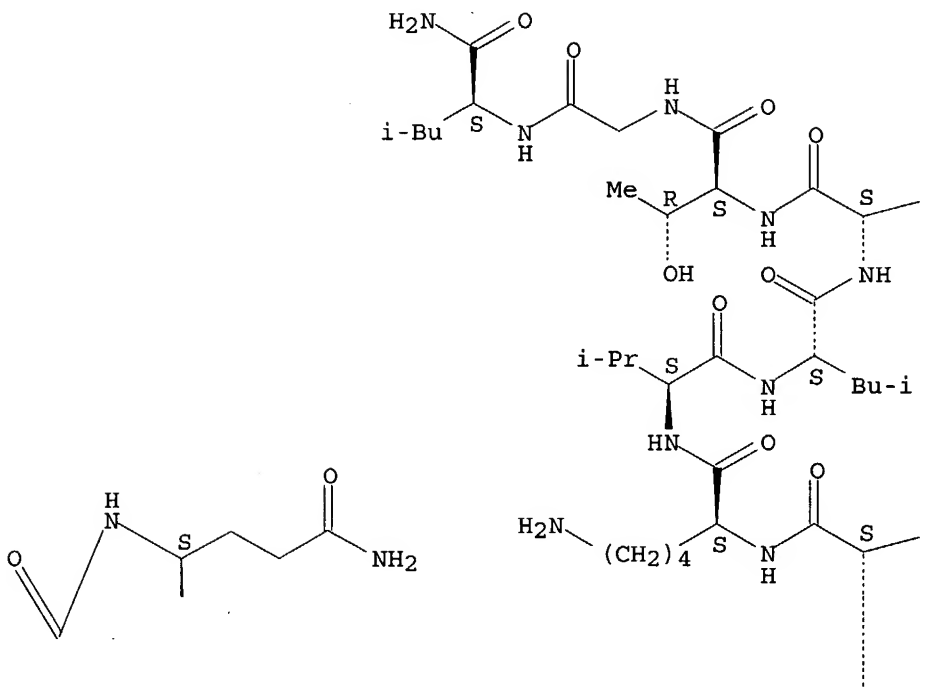
CN L-Leucinamide, L-leucyl-L-isoleucyl-L-seryl-L-tryptophyl-L-isoleucyl-L-lysyl-L-arginyl-L-lysyl-L-arginyl-L-glutaminyl-L-glutaminylglycyl-L-isoleucylglycyl-L-alanyl-L-valyl-L-leucyl-L-lysyl-L-valyl-L-leucyl-L-threonyl-L-threonylglycyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



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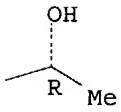

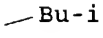

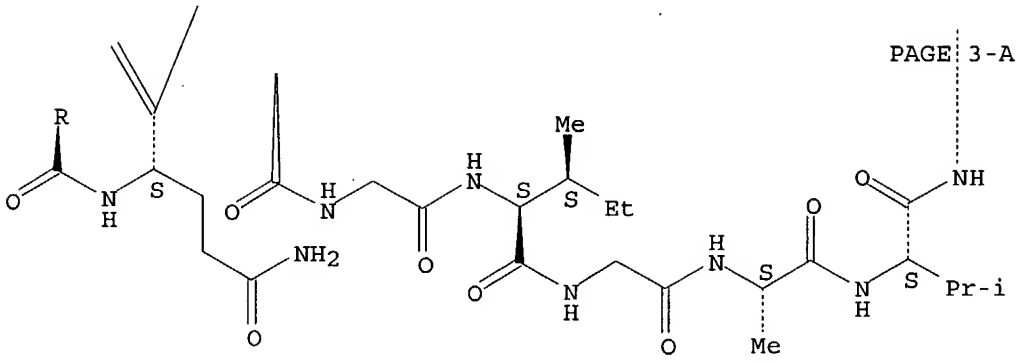

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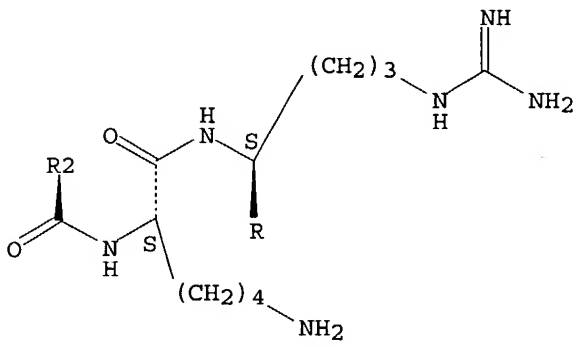

L13 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1987:549380 HCAPLUS
DN 107:149380
ED Entered STN: 31 Oct 1987
TI Import of honeybee prepromelittin into the endoplasmic reticulum: structural basis for independence of SRP and docking protein
AU Mueller, Guenter; Zimmermann, Richard
CS Inst. Physiol. Chem., Univ. Muenchen, Munich, D-8000/2, Fed. Rep. Ger.
SO EMBO Journal (**1987**), 6(7), 2099-107
CODEN: EMJODG; ISSN: 0261-4189
DT Journal
LA English
CC 6-1 (General Biochemistry)
AB Honeybee prepromelittin is correctly processed and imported by dog pancreas microsomes. Insertion of prepromelittin into microsomal membranes, as assayed by signal sequence removal, does not depend on signal recognition particle (SRP) and docking protein. The question as to how prepromelittin bypasses the SRP/docking protein system was addressed. Hybrid proteins between prepromelittin, or C-terminally truncated derivs., and the cytoplasmic protein dihydrofolate reductase from mouse were constructed. These hybrid proteins were analyzed for membrane insertion and sequestration into microsomes. The results suggest the following: (1) the signal sequence of prepromelittin is capable of interacting with the SRP/docking protein system, but this interaction is not mandatory for membrane insertion; this is related to the small size of prepromelittin. (2) In prepromelittin a cluster of neg. charged amino acids must be balanced by a cluster of pos. charged amino acids to allow membrane insertion. (3) In general, a signal sequence can be sufficient to mediate

membrane insertion independently of SRP and docking protein in the case of short precursor proteins; however, the presence and distribution of charged amino acids within the mature part of these precursors can play distinct roles.

ST prepromellitin transport endoplasmic reticulum; signal recognition particle prepromellitin endoplasmic reticulum; docking protein prepromellitin endoplasmic reticulum

IT Protein sequences
(of prepromellitin-dihydrofolate reductase chimeric proteins)

IT Endoplasmic reticulum
(prepromellitin import by, signal recognition particle and docking protein independence of, structural basis for)

IT Microsome
(prepromellitin insertion into membrane of, signal recognition particle and docking protein independence of, structural basis for)

IT Biological transport
(absorption, of prepromellitin by endoplasmic reticulum, signal recognition particle and docking protein independence of, structural basis for)

IT Proteins, specific or class
RL: BIOL (Biological study)
(docking, prepromellitin import by endoplasmic reticulum independence of, structural basis for)

IT Proteins, specific or class
RL: PROC (Process)
(fusion products, construction of)

IT Peptides, biological studies
RL: BIOL (Biological study)
(signal, in protein import by endoplasmic reticulum, signal recognition particle and docking proteins dependence in relation to)

IT Ribonucleoproteins
RL: BIOL (Biological study)
(signal recognition, prepromellitin import by endoplasmic reticulum independence of, structural basis for)

IT **87608-85-3**
RL: BIOL (Biological study)
(absorption of, by endoplasmic reticulum, signal recognition particle and docking protein independence of, structural basis for)

IT 9002-03-3D, Dihydrofolate reductase, -prepromellitin chimeric proteins
87608-85-3D, -dihydrofolate reductase chimeric proteins
RL: PRP (Properties)
(construction and amino acid sequences of)

IT **87608-85-3**
RL: BIOL (Biological study)
(absorption of, by endoplasmic reticulum, signal recognition particle and docking protein independence of, structural basis for)

RN 87608-85-3 HCAPLUS
CN Melittin, prepro- (honeybee) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT **87608-85-3D**, -dihydrofolate reductase chimeric proteins
RL: PRP (Properties)
(construction and amino acid sequences of)

RN 87608-85-3 HCAPLUS
CN Melittin, prepro- (honeybee) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L13 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1983:570598 HCAPLUS
DN 99:170598
ED Entered STN: 12 May 1984
TI Nucleotide sequence of cloned cDNA coding for honeybee prepromelittin

AU Vlasak, Reinhard; Unger-Ullmann, Claudia; Kreil, Guenther; Frischauf, Anna Maria
CS Inst. Molekularbiol., Oesterr. Akad. Wiss., Salzburg, A-5020, Austria
SO European Journal of Biochemistry (**1983**), 135(1), 123-6
CODEN: EJBCAI; ISSN: 0014-2956
DT Journal
LA English
CC 3-4 (Biochemical Genetics)
Section cross-reference(s): 12
AB Total mRNA from venom glands of young queen bees was transcribed into cDNA and cloned into the PstI site of plasmid pBR322. The nucleotide sequence of 2 clones with inserts containing genetic information for prepromelittin [66369-20-8] is presented. The longer insert encompasses 374 base pairs, including 52 nucleotides before the initiation codon, and a 3' noncoding region of 112 base pairs. The 70 amino acids of prepromelitin represent the total coding capacity of the mRNA from which this insert is derived. Southern blot anal. with this cloned cDNA showed that it hybridizes with a single EcoRI fragment of honeybee DNA which contains .apprx.3000 base pairs.
ST prepromelittin cDNA cloning sequence honeybee; melittin cDNA sequence honeybee; gene melittin honeybee
IT Gene and Genetic element, animal
RL: PROC (Process)
(for melittin, of honeybee, localization of)
IT Honeybee
(melittin-sp. mRNA of, cloning and sequence of DNA complementary to)
IT Protein sequences
(of melittin, of Apis mellifera, complete)
IT Molecular cloning
(of melittin-sp. DNA complementary to honeybee mRNA)
IT Protein sequences
(of prepromelittin, of Apis mellifera, complete)
IT Protein sequences
(of promelittin, of Apis mellifera, complete)
IT Ribonucleic acids, messenger
RL: BIOL (Biological study)
(melittin-specifying, of honeybee, cloning and sequence of DNA complementary to)
IT Deoxyribonucleic acid sequences
(melittin-specifying, of Apis mellifera, complete)
IT 20449-79-0 87608-81-9 **87608-85-3**
RL: PRP (Properties)
(amino acid sequence of)
IT 87659-04-9
RL: PRP (Properties); BIOL (Biological study)
(nucleotide sequence of)
IT 66369-20-8
RL: PRP (Properties)
(of honeybee, cloning of cDNA for)
IT 37231-28-0 37231-70-2
RL: PRP (Properties)
(of honeybee, sequence of)
IT **87608-85-3**
RL: PRP (Properties)
(amino acid sequence of)
RN 87608-85-3 HCAPLUS
CN Melittin, prepro- (honeybee) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 24 AUG 2004 HIGHEST RN 732209-96-0
DICTIONARY FILE UPDATES: 24 AUG 2004 HIGHEST RN 732209-96-0

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

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                (87608-85-3/RN)

=> s l17 and l1
L18           1 L17 AND L1

=> d sqide can

L18  ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2004 ACS on STN
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CN   Melittin, prepro- (honeybee) (9CI)  (CA INDEX NAME)
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**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
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CI   MAN
LC   STN Files:   CA, CAPLUS, TOXCENTER
DT.CA  CAplus document type:  Journal
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RLD.NP Roles for non-specific derivatives from non-patents:  PRP (Properties)
               2 REFERENCES IN FILE CA (1907 TO DATE)
               1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
               2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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REFERENCE   2:  99:170598


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